IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Pierre Belhumeur, *et al.*	Art Unit:	1651
Serial Number:	09/980,649	Examiner:	Kim, Taeyoon
Filing Date:	June 4, 2002		
For:	BIOLOGICAL INDICATORS FOR VALIDATING A PRION STERILIZATION PROCESS		

CERTIFICATE OF MAILING UNDER 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 on **March 23, 2009**.

Michele Hofherr
(Name of Person Depositing Mail)

Michele Hofherr 3-23-09
(Signature and Date)

DECLARATION UNDER 37 C.F.R. §1.132

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I, Michel AIGLE, do hereby declare and state as follows:

1. My degrees in Science in the field were all obtained in the Université Louis Pasteur in Strasbourg (France) as follows:
- 1970. « Maîtrise de Génétique » (5 years academic studies).
- 1971 « Diplôme d'Etudes Approfondies » (Research and laboratory degree).
- 1974. First "Thèse de troisième cycle" after 3 years experimental research.
- 1979 Doctorat (pH.D)

I am presently professor in Genetics and cell biology in the University of Lyon1 (France).

2. My academic background and experiences in the field of the patent are listed on the enclosed *curriculum vitae*.

3. I am the author of several publications in the field as listed in my enclosed *curriculum vitae*.

4. I began to work on the yeast prion phenomenon in 1970, well before it was recognized as such, so it is now 39 years that I am in the field. Out of my publications and review, I participated to numerous meetings and discussions about the prion phenomenon. Moreover I was, as a member or president , participating in the jury of a dozen of pHD and "HDR", the higher degree in the French universities.My opinion is presented below to support the position of the applicant.

5. There is a debate over the recognition of the novelty of a method to evaluate the efficacy of sterilization process involving the use of yeasts prion proteins. This debate opposes the applicant and a publication by Safar *at al.* (1993)

6. The patent application is entitled "Biological Indicators for Validating a Prion Sterilization Process". It describes and claims a method using a yeast prion as an indicator for evaluating prion inactivation and destruction in a sterilization context. The method relies essentially on assessing the efficacy of the sterilization procedure by measuring the yeast prion residual amount after for example ozone exposure, a powerful oxidative agent. In this context, there is a physical destruction of the yeast prion. This is demonstrated by different analytical methods, among them is a Western blot experiment. Thus, the method presented in the present application measures and validates the ABSENCE of residual yeast prion proteins to confirm the efficacy of the sterilisation procedure.

7. Safar's work cited as prior of art is intituled "Thermal stability and conformational transitions of scrapie amyloid (prion) protein correlate with infectivity".In this publication, Safar and coauthors demonstrated that after thermal treatment, the CONFORMATION of prion protein is changed, and correlatively, loss its infectivity. This demonstration is based on a classical Western blot experiment. People who are skill in the art know that this "Western blot" technology is not well adapted to this goal. Western blot was originally established to measure the presence and the Molecular Weight of proteins more then their conformation. In some particular cases, it can suggest a change in conformation, which is the case in Safar's paper. Nevertheless, it is very obvious on the fig1 of Safar's work (compare lines 5 to others), that in this experiment, the prion proteins are still present, in about the same quantity before and after tratement. So, in contrary to the patent application, no physical destruction of the prion protein nor occurred, nor are demonstrated and even suggested in this work.

8. I herby declare that all statements made therein of my own knowledge are true, and that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by a fine or imprisonment or both (18 U.S.C. Sec. 1001), and may jeopardize the validity of the application of any patent issuing thereon.

Signed :
Michel AIGLE

Dated:
March 05, 2009.